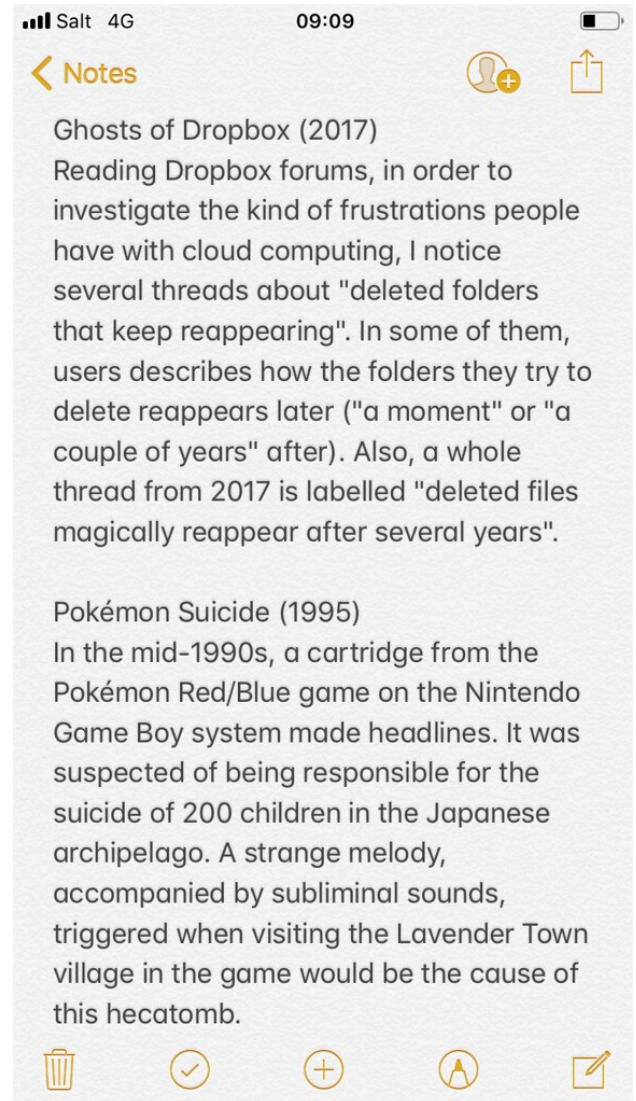
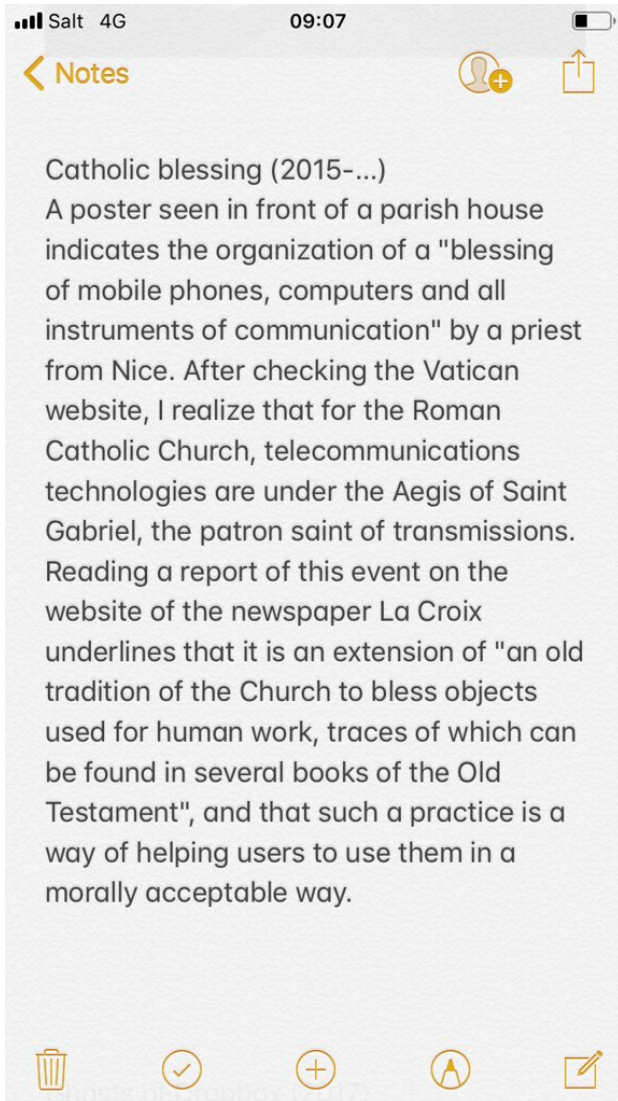


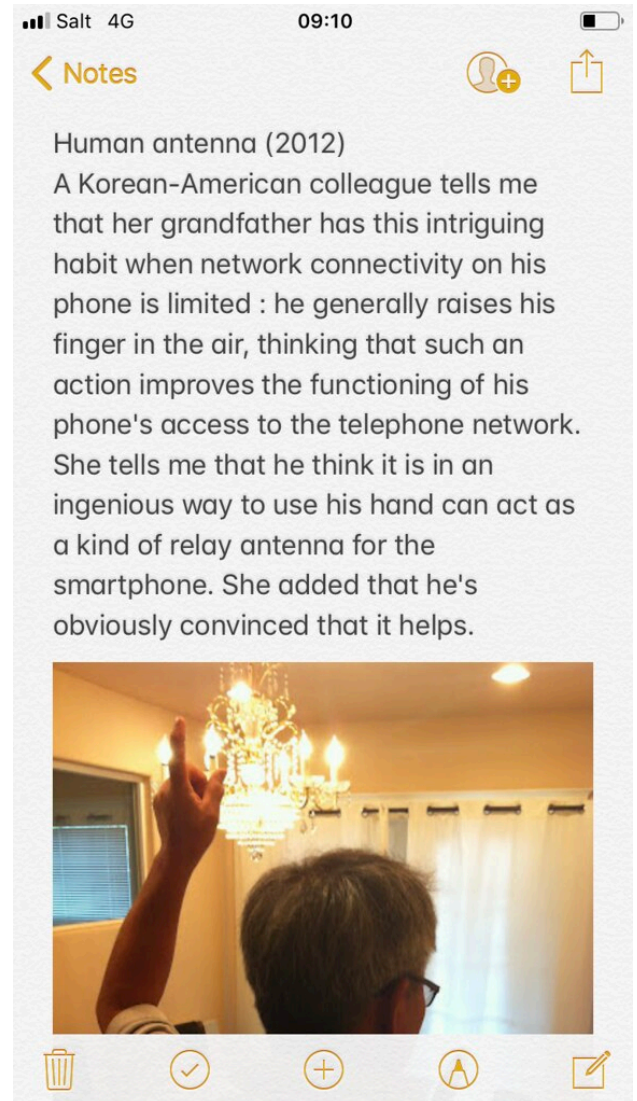
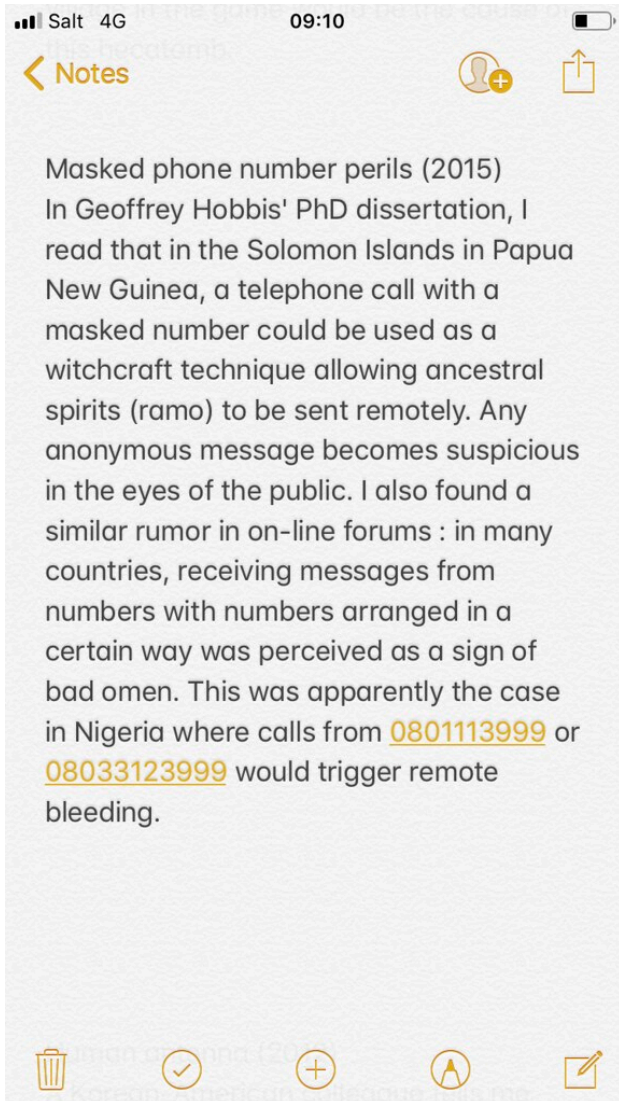
A Persistence of Magical Thinking?

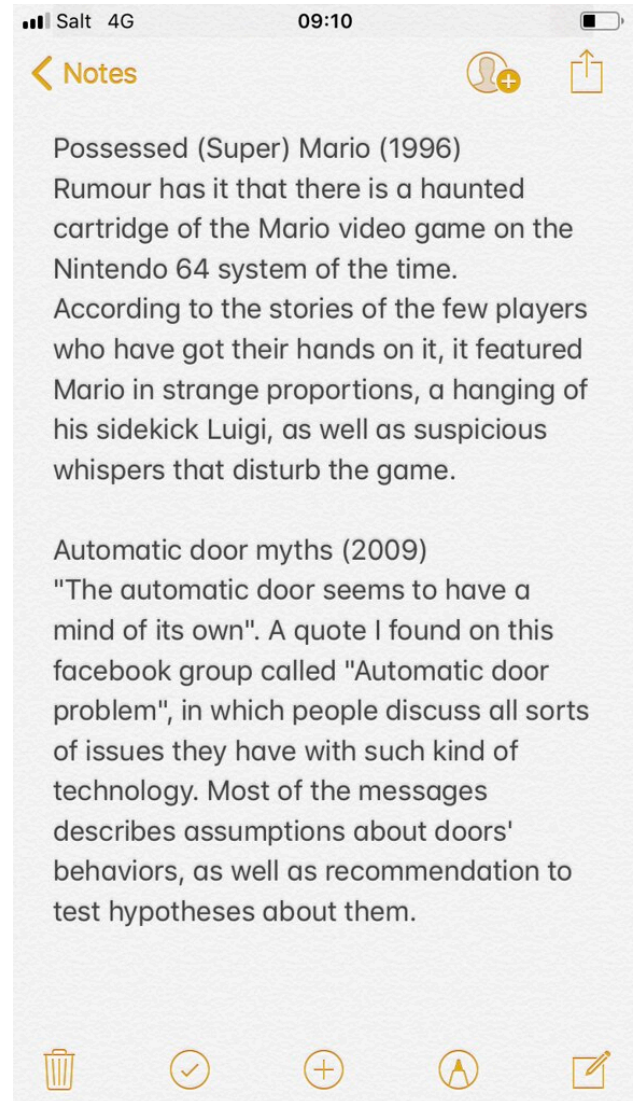
Nicolas Nova

One of the files in my smartphone's Notes app is named "Digital beliefs." This is a document I update weekly, when confronted with unconventional uses of digital technologies, or habits and behaviors relating to supernatural influences.^[1] Although most of this file is based on field observations from ethnographic research, I also include material from my day-to-day monitoring of social networks and publications. Starting out, my suspicion was that digital cultures and practices were not necessarily seen as rational. Investigating the topic more closely, I began to question an apocryphal aspect of technologies; namely, the persistence of magical thinking in how digital devices and software are used and envisioned in popular consciousness.

What is in this note? Take a look at my phone and a selection of cases that I have put together. Since this compilation is situated^[2] and not exhaustive,^[3] this discussion will focus less on systematic analysis than providing insight into those framings and methods able to accommodate this kind of material.







Understanding Micropractices and Their Own Logic

The first observation drawn from this inventory is clear: the phenomena of magical or superstitious beliefs are pervasive, despite the rational ideology underpinning their adoption and use. The selected cases illustrate several facets of an emerging perspective on what some of my informants called "a kind of magical thinking" around digital technologies and cultures. The Pokémon and Mario examples stand as "rumors," as does the injurious cell phone number — though the latter's reference to magic leads us to wonder whether something more is at stake. A more positive use of the term "magic" is seen on the WiFi billboard, less an assumption of users than a quality attributed to the wireless exchange of data by an advertiser or service provider. Religious habits, such as making the sign of the Cross on a smartphone display, are

another category. Finally, we have the misunderstandings and best-guesses that lead people to speculate about technological agency (doors) and behavior (smartphone connectivity).

In this inventory, we see a demonstration of Marcel Mauss' observation that "technical action, physical action, magico-religious action are confused for the actor."^[4] The cited examples correspond to what Lionel Obadia calls "a set of microbeliefs and micropractices (generally not elevated to the level of a true system of magic and even less religion) which are inscribed (...) in the form of a substrate of popular culture that folklorists have tried to collect and record."^[5] The idea of acting as a folklorist in the digital age is, perhaps, stigmatised.^[6] However, as Obadia argues, collecting anecdotes and observations can serve a purpose. In a recent article, drawing on ethnographies recently published in France and the US, he starts by noting that how superstitions have endured—something that cuts against established understandings of modernisation as a process of disenchantment and cultural rationalization.^[7] Obadia also points out that although the concept of "superstition" is rooted in a condescending othering of "backward" or non-Western modes of thinking, it does not mean it should be abandoned. On the contrary, the term is highly versatile; a plastic category that "constantly exceeds any attempt at definition" and, as such, demands a pragmatic approach, exploring and mapping the "conditions, issues, (...) targets and intentions of [its] use."^[8] By exploring how superstitions and rumors spread, the role they play in everyday life, and who they affect and how, researchers can work to elicit their internal logic. Such investigations provide a foundation for understanding their significance and how they are grounded in cultural practice.

Another lesson comes from the work of anthropologist Julien Bonhomme, who has written on rumors and superstitions in Africa. Drawing on his experiences working in Europe and West Africa, Bonhomme argues that there is a need to "de-exoticize" rumours, stripping away their esoteric cosmologies to better appreciate how they reference and reflect quotidian concerns.^[9] For Bonhomme, rumors are a universal phenomena, "killer phone numbers are probably based on Asian horror movies, then adapted by Hollywood."^[10] Moving away from a "common sense" understanding of rumor as purely pejorative

allows us to make sense of particular examples in "their own logic," and avoid getting caught up in questions of truth or falsehood—which, Bonhomme concludes, does not prevent us from rejecting the moral relativism that would defend their content.

This short detour through some of the anthropological literature shows us that, in examining the cases introduced above, it is preferable to leave aside a generalist and evaluative perspective that juggles with broad categories of "magic" and "superstition." Instead, it is better to follow Obadia in taking a pragmatic approach, focusing on the conditions, issues, and targets of such phenomena, and the intentions of those who talk about such practices or invoke these terms. In the next section, I demonstrate this, with reference to the circumstances of some of the observations introduced at the start .

A Window on (Technological) Confusion

In following these methodological precautions, I recognise that my observations may encompass different phenomena, and must be questioned on a case-by-case basis. In this section, I put aside both rumors and religious uses of digital technologies, focusing instead on the supernatural attributions that users make of things such as automatic doors, Dropbox folders, or smartphone connectivity. What can we make of these? What questions must we ask in order to understand them by "their own logic," as suggested by Bonhomme?

What strikes me here is that the use of the term "magic" is less significant than users' difficulty in understanding how these devices actually work. The invisibility and opacity of such technologies' infrastructural underpinnings,^[11] combined with the recurrence of bugs and glitches, may prove confusing or difficult to explain. Re-appearing Dropbox files may result from an infrequent malfunction, or a conceptual misunderstanding of the design and workings of the platform's shared folder system. Difficulties predicting the behavior of an automatic door might derive from the loss of handle affordances, the absence of signage, or faulty sensors. These examples highlight the extent to which the behavior of technological objects is opaque and mysterious, requiring users to build their own assumptions about their mechanisms and operation. This explains why, for some people, the automatic door seems to "have a mind of its own,"

or why someone might raise their hand hoping the gesture will strengthen their cell phone signal. Elsewhere, I have encountered users who tap their phones or remote controls on their heads when those devices fail to work as promised. Are these placebo gestures, naïve behaviors, or are they really effective? The answers seem less important than understanding why users do what they do with increasingly cryptic technologies, opaque or closed devices and whose logic is far too complex to grasp.^[12] These tactics, often involving gestures, reveal a part of the domestication process that occur when people appropriate technological objects. These gestural attempts to fix one's devices are shaped by users' perceptions of what went wrong, the potential causes of the problem(s), and where and how to act upon their devices. The finger raised to improve network connectivity is based on a particular user's impression that electromagnetic waves can better move through his arm (as he told us afterwards.)^[13]

User ignorance of the increasingly complex functionality of digital technologies is not, however, the only reason for their apocryphal character. As demonstrated by the WiFi billboard, the intentional use of the term "magic" by digital organizations is also an important phenomenon, reflecting how technological illiteracy is skilfully maintained, with advertisers and marketing professionals leveraging their systems' opacity to seduce would-be users. The metaphor of magic is commonly used in these communities, as can be seen in any design or programming conference, and in business leaders' rhetoric and use of terminology. Take, for example, Steve Jobs' 2007 MacWorld keynote, "We're gonna touch this with our fingers. And we have invented a new technology called multi-touch, which is phenomenal. It works like magic." Or how Jonathan Ive, then Vice-President of Design at Apple Computer, complemented this vision claiming that, "when something exceeds your ability to understand how it works, it sort of becomes magical."^[14] During a public discussion on the Facebook platform, Dennis Crowley, founder of Foursquare, described how his organization's objective was to feed the "genius" present in the smartphone, enabling the object to make suggestions to users, "Right now, every time you 'slide to unlock', you are summoning the genie... soon the genie will just tap you on the shoulder—'Hey Dennis I found something awesome...' (and Foursquare will power that)."

Fundamental to these speeches, this desire to infuse magic into digital media can be seen, too, in how the sentence "any sufficiently advanced technology is indistinguishable from magic," coined by science consultant and science fiction writer Arthur C. Clarke, has, for designers, becomes something approaching a mantra. Originally a statement about the extraordinary, mythical quality of many technological objects, particularly in fiction, its apparent ubiquity in talks^[15] and design publications^[16] raises the possibility of the claim having become an objective in itself. Not that this is new. Analyzing advertisements published in Time Magazine in the 1980s, Stahl demonstrates how the metaphor of "magic" made it possible for readers to understand the meaning of the personal computer, then a new piece of technology.^[17] For critics such as Evan Selinger and Cameron Tonkinwise, use of the "magic" metaphor is reductive, oriented towards a form of consumerist seduction that masks the functioning of technical objects and the consequences of their use.^[18] From the opacity of the technological device, the secrecy of the organizations that produce them, and through to the use of the "magic" metaphor as a modality of seduction, these factors make it seem as if digital technologies such as smartphones are symbolically granted an extraordinary status, far removed from the systems and artifacts of everyday life.

A Co-evolution of Magic?

I started this article sharing some examples of beliefs held by users of digital technologies. Drawing on recent anthropological publications on magic, superstitions and rumour, it seems one way to explore common knowledge and folk understandings is to grasp their pragmatic dimension. Approaching them in terms of "their own logic" offers insight into those who hold these beliefs, how such understandings appear in public discourse, and how this, in turn, influences people's use of technology. Focusing on those cases cited at the start, I showed how the magical, and therein apocryphal, character of digital technologies results from the co-evolution of two trends: user misunderstandings of hardware and software, and a strategy of seduction, adopted by companies and the media, which turns on the deliberate projection of an imaginary of magic and enchantment. This is not necessarily new, and may correspond with Alfred Gell's comments on wood-carving

techniques, which, according to him, illustrated the "technology of enchantment and the enchantment of technology," i.e. how the high technical complexity of wood patterns subject people to their wizardlike seduction.^[19] Nevertheless, such a logic may better explain the persistence of magical thinking, and do so in a more pragmatic way, than a rapid recourse to animist ontologies and esoteric cosmologies. The Catholic blessing of smartphones, for example, may be described (and mocked) in common understandings as the persistence of an established ritual that sanctifies an artifact to some sacred purpose. A pragmatic perspective might, for instance, look at how the practice is explained by the priest in the French local press; his words revealing it to be not mystical, but simply so "that everyone understands that they must make good, beautiful and honest use of it."^[20]

Exploring the apocryphal character of digital technologies does not simply mean cataloguing how their use and meaning deviate from rational thought (as the notes on my smartphone may suggest). In addition, it can provide a way to contemplate how situated tactics enable people to domesticate their technologies – and, perhaps, enable designers to create products and services with this in mind.

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[1] Deriving from my interest in gestural habits and digital technologies.

[2] Lucy Suchman, *Plans and Situated Actions: The Problem of Human/Machine Communication*, (Cambridge: Cambridge University Press, 1987).

[3] I took most of these notes from 2012–2018, while undertaking research for three projects: "Curious Rituals" (2012), my PhD dissertation in

social sciences at the University of Geneva, and an SNF project about smartphone repair cultures. The first focused on documenting gestures adopted by users of digital technologies. The second addressed how people made sense of their smartphone, and the third was about the roles and activities of repair shops/hackerspaces.

[4] Marcel Mauss, "Body Techniques," in *Sociology and Psychology*, translated by Ben Brewster (London: Routledge, 1979), 102–3.

[5] Lionel Obadia, "Les 'superstitions' à l'épreuve de la modernité: un retour en grâce?" *Social Compass* 63.4 (2016): 501–2.

[6] For this kind of debate see Gabriele de Seta, "Digital folklore," in *Second International Handbook of Internet Research*, edited by J. Hunsinger, L. Klastrup, & M. M. Allen (Dordrecht, Netherlands: Springer, 2016) pp. 1-17

[7] See Max Weber, *The Sociology of Religion*, translated by E. Fischoff, (Boston: Beacon Press, 1963).

[8] Obadia, 509-510.

[9] [U]nderstanding the rumour of killer numbers is to be interested in the social uses of the mobile phone," Julien Bonhomme, "Fausses rumeurs? Éthique et épistémologie de la vérité," *Monde commun: Des anthropologues dans la cité* no. 2 (2019): 168.

[10] Ibid.

[11] Susan Leigh Star, "The Ethnography of Infrastructure," *American Behavioral Scientist* 43.3 (1999): 377–391.

[12] Bruno Latour, *Pandora's Hope: Essays on the Reality of Science Studies* (Cambridge, MA: Harvard University Press, 1999).

[13] As illustrated in Nicolas Nova, *Curious Rituals: Gestural Interaction in the Digital Everyday* (Venice, CA: NFL Press, 2012).

[14] Anthony Ha, "How is Apple marketing the iPad? It's magical!" *Venture Beat*, 2010. <https://venturebeat.com/2010/01/27/apple-ipad-commercial/>

[15] See for instance Josh Clark, "Magical UX and the Internet of Things," *Interaction Design*, 2016: <https://vimeo.com/159668525>.

[16] A Google query combining this quote with the keywords "interaction design" returns 2.260 results, mostly blog posts, videos, conference transcripts and book excerpts.

[17] W.A. Stahl, "Venerating the Black Box: Magic in Media Discourse on Technology," *Science Technology Human Values* 20.2 (1995): 234-258.

[18] See Evan Selinger, "Too Much Magic, Too Little Social Friction: Why Objects Shouldn't Be Enchanted," *Los Angeles Review of Books*, 2015. <https://lareviewofbooks.org/article/much-magic-little-social-friction-objects-shouldnt-enchanted/>. Also see Cameron Tonkinwise, "The Magic That Is Design," (pp. 81-100) in *Tricky Design: The Ethics of Things*, edited by T. Fisher & L. Gamman (London: Bloomsbury, 2019).

[19] Gell, A.F. , *Art and Agency: An Anthropological Theory*. (Oxford: Clarendon, 1998)

[20] Dounia Malki, "Nice: Une messe pour bénir les téléphones portables et autres tablettes tactiles," *Marie Claire* (2013). <https://www.marieclaire.fr/gil-florini-messe-telephone-tablette-nice-eglise-saint-pierre-d-arene.701463.asp>